Avision

Sheet-fed Duplex Scanner

User's Manual

Regulatory model: FF-0609H

Avision Inc.

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- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your point of purchase or service representative for additional suggestions.

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This symbol on the product or on its packaging indicates that the product can not be disposed of with your other household waste. Instead it should be sent to appropriate facilities for recovery and recycling in an effort to protect human health and the environment. Fore more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

As an ENERGY STAR® Partner, Avision Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

System Requirements

- IBM compatible PC 586, Pentium or higher
- Microsoft Windows 98SE/Me/2000/XP
- USB port 2.0 (compatible with USB 1.1)
- At least 100 MB of free hard disk space
- At least 128 MB of system memory
- A CD-ROM drive

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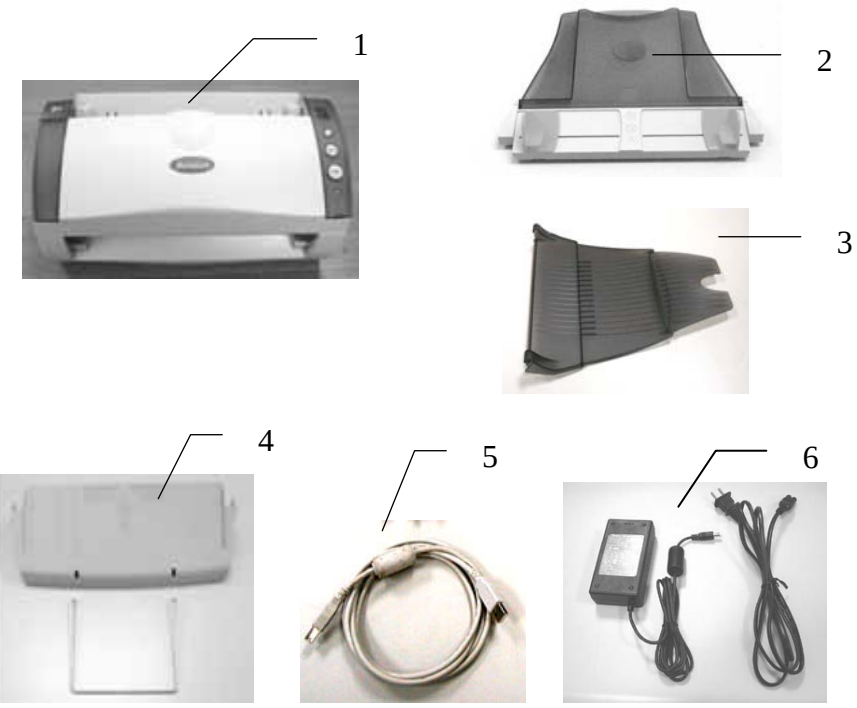
1. Introduction

Congratulations on your purchase of the color sheet-fed image scanner. With this scanner, you can quickly scan documents in duplex (double-sided) mode to increase productivity.

Before you install and operate the new scanner, please take a few minutes to read through this manual. It provides proper instructions for you to unpack, install, operate and maintain the scanner.

The following figure indicates the package contents. Please check all the items against your checklist. If you do not receive all the items, please contact your authorized local dealer immediately.



1. **Scanner Main Unit**
2. **ADF Paper Tray**
3. **ADF Output Paper Tray**
4. **Front Tray & Extension Wire**
5. **USB Cable**
6. **Power Adapter & Power Cord**

Note:

1. *Only use the AC adapter HEG42-240200-7L made by Hitron or SA148A-24V/SA60-24 made by Sino-American included in the machine. Using other AC adapters may damage the machine and void the warranty.*
2. *Please unpack the packing carefully, and check the contents against the checklist. If any items are missing or damaged, please contact your dealer immediately.*

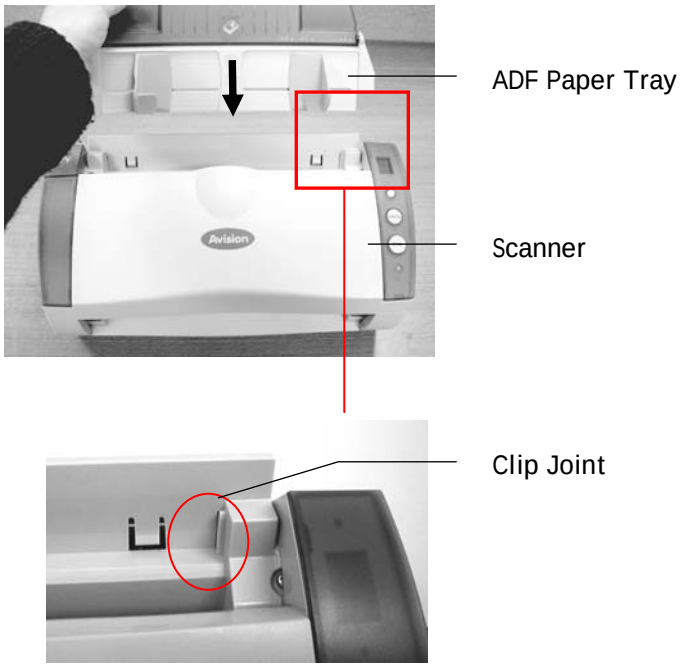
2. Scanner Installation

Precautions

- Keep the scanner out of direct sunlight. Direct exposure to the sun or excessive heat may cause damage to the unit.
- Do not install the scanner in a humid or dusty place.
- Be sure to use the proper AC power source.
- Place the scanner securely on an even, flat surface. Tilted or uneven surfaces may cause mechanical or paper-feeding problems.
- Retain the scanner box and packing materials for shipping purposes.

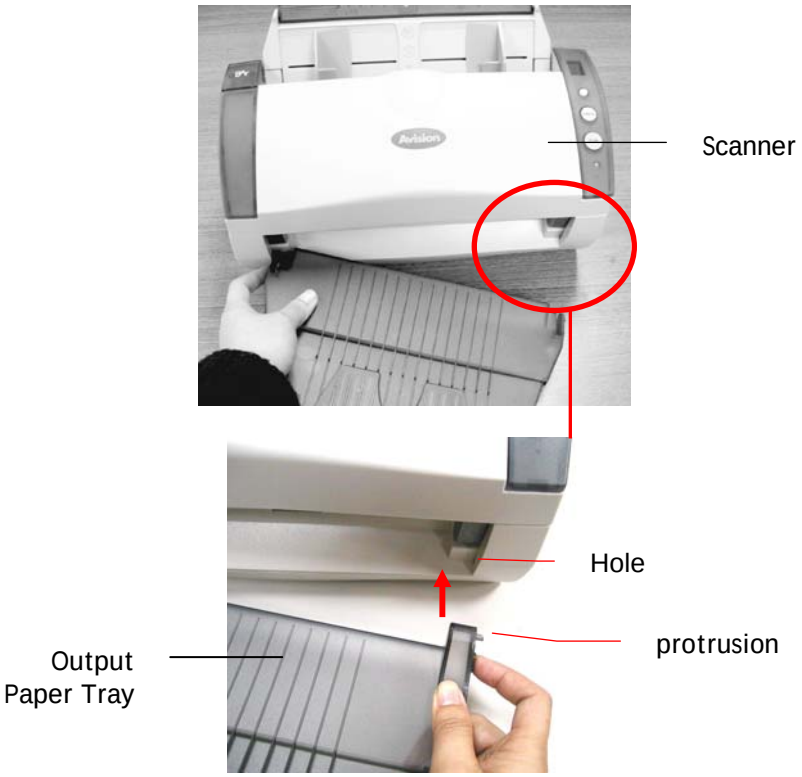
2.1 Installing the ADF Paper Tray

1. Attach the ADF Paper Tray to the clip joint of the scanner as indicated below. When properly insert, you will hear a snap-in sound.



2.2 Installing the ADF Output Paper Tray

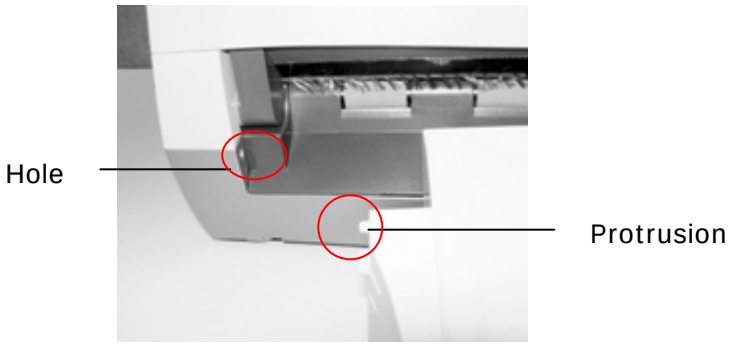
1. Hold the Output paper tray some 30 degrees as shown in below.
2. Insert the right protrusion of the Output Paper Tray into the hole on the front of the scanner.
3. Insert the left protrusion of the Output Paper Tray slightly into the hole on the front of the scanner.

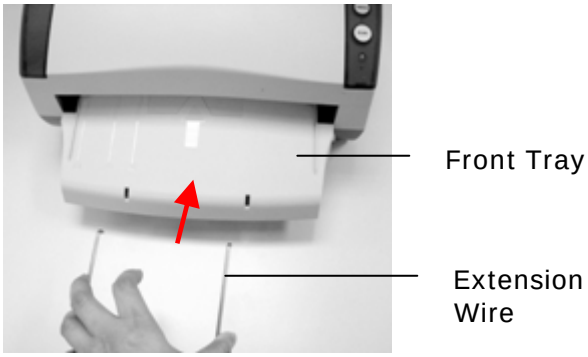


2.3 Installing Front Paper Tray

If you wish to feed paper from the front tray, please remove the ADF output tray first and then install the front paper tray.

1. Insert the left protrusion of the front paper tray into the hole on the front of the scanner.
2. Press the right protrusion to fit into the hole of the scanner.
3. Insert the extension wire to the front tray.





2.4 Installing the Scanner Driver and Connecting the Cables

NOTE:

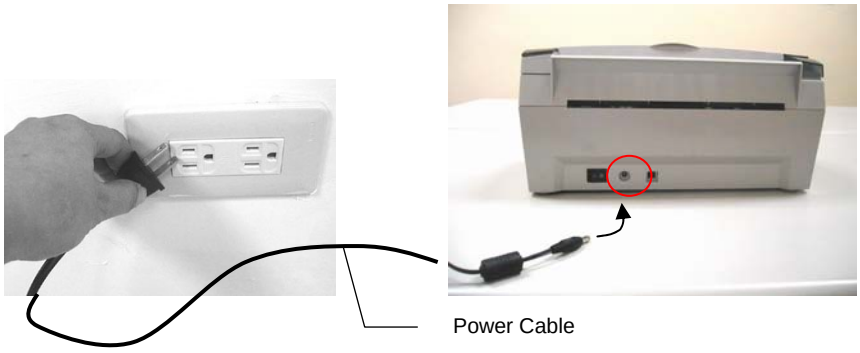
1). The Windows system CD may be required when installing on some PC's.

2). To ensure your computer can identify the USB scanner, please install scanner driver first before connecting the scanner to your computer.

2.4.1 Connecting to Power

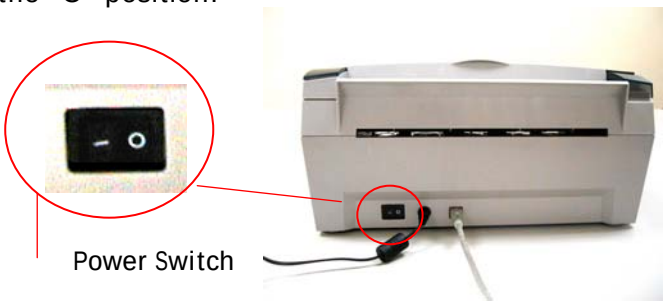
Before connecting, make sure the power switch is off.

Plug the small end of the power adaptor into the power jack of your scanner. Insert the other end to an appropriate power outlet.



2.4.2 Turning on the Power

After the power cable and the USB cable have all connected, press the power switch to the “I” position to turn on the scanner. To turn off the scanner, please press the power switch to the “O” position.



2.4.3 Installing the Scanner Driver

1. Place the supplied CD-ROM onto your CD-ROM drive.
2. The software installation graphic appears. If not, run **“setup.exe”**.

CD Setup
Avision
A vision of your office
www.avision.com
To ensure the buttons work properly on the scanner, please FIRST install Button Manager before installing the scanner driver.
Install Button Manager
Install Scanner Driver
Install Adobe Reader
View Manuals
Exit

Contents on the installation graphic:

- **Install Button Manager**: To use the buttons on the scanner, you need to install Button Manager. To ensure Button Manager works properly, please FIRST install Button Manager before installing the scanner driver.

- **Install Scanner Driver:** To communicate with your scanner, you need to install the scanner driver. After installing the Button Manager software, click **Install Scanner Driver** to install the scanner driver on your computer.

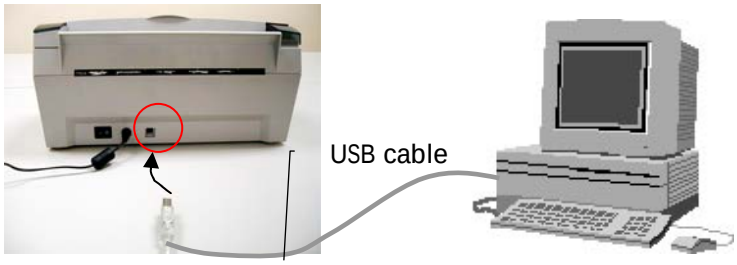
- **Install Adobe Reader:** To view the user's manuals for the scanner and Button Manager, you need to use Adobe Reader to open and view the manuals in pdf file format. If you already have Adobe Reader installed on your computer, you may disregard this item.

- **View Manual:** Click **"View Manual"** to view or print the detailed user manual for the scanner and Button Manager respectively.

3. Click **Install Button Manager** to install the Button Manager software and then click **Install Scanner Driver** to install the scanner driver on your computer.

2.4.4 Connecting to Computer

1. Connect the **square end** of the USB cable to the USB port of your scanner. Connect the **rectangle end** to the USB port of your computer.



2. The computer should detect a new USB device and prompt a **"New Hardware Found"** message.

(Windows 9X/Windows ME)

3. In Windows 9X/Windows 2000 or Windows ME, confirm that the "**Search for a better driver."** is selected and click the **"Next"** button.

Add New Hardware Wizard
Windows has found the following new hardware:
USB Scanner
Windows can automatically search for and install software that supports your hardware. If your hardware came with installation media, insert it now and click Next.
What would you like to do?
Automatic search for a better driver (Recommended)
Specify the location of the driver (Advanced)
< Back
Next >
Cancel

In Windows XP, click the **Next** button to continue. When the XP certification screen appears, click **Continue Anyway** to complete the installation.

4. When the **Finish** dialog is prompted, click the **Finish** button.

Note:

To uninstall the scanner driver in Windows XP, be sure to keep your scanner connecting to your computer.

3. Completing Your First Scan

3.1 Loading Your Paper

3.1.1 Notice on Using the ADF

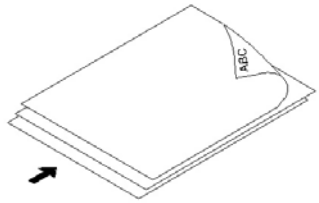
Before using the ADF, please make sure that your paper meets the following specifications:

- Document(s) can range in size from 3.5 by 2 inches to 8.5 by 14 inches (Legal).
- Document(s) can range in weight from 16 to 28 lbs
- Document(s) should be square or rectangular and in good condition (not fragile or worn).
- Document(s) should be free of curl, wrinkle, tears, wet ink, or punch holes.
- Document(s) should be free of staples, paper clips, paper sticky notes.

3.1.2 Placing Your Document in the ADF Paper Tray

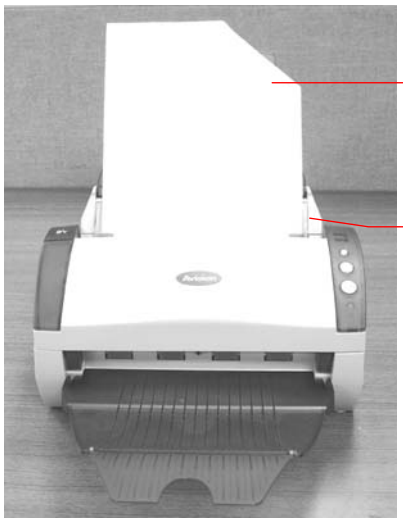
Fanning Your Document

Standard paper size should feed easily through the scanner. To avoid occasional paper jam when automatically feeding multiple documents, loosen the paper before loading.



Document feeding

Place your document with the text face down on the ADF Paper Tray. Align the two sides of the document with the slide guides. Please note that the ADF Paper Tray can hold up to 50-page document at a time.



Your Document (Face Down)

Paper Slider

3.1.3 Placing Your Document On the Front Tray

Place your document with the text face down on the front tray as indicated below.

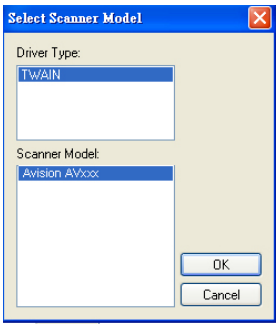
3.2 Verifying Your Scanner Installation

To verify if your scanner installation is correct, Avision provides you a useful test program called Avision Capture Tool. With this tool, you can perform simple scans and view the captured images. In addition, it helps you complete your scan at a rated speed.

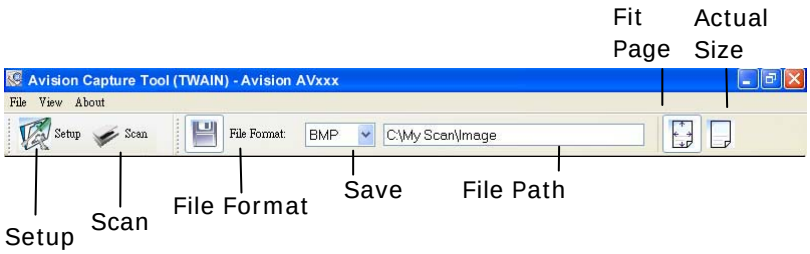
The following procedure describes how to verify your scanner installation. If the installation is not correct, please review the preceding section to check if the cable connection and scanner driver have been successfully installed.

Before you begin, be sure the scanner is on.

1. Select Start>Programs>Avision AVxxx Scanner>Avision Capture Tool.
   The Select Scanner Model dialog box will be displayed.



2. Select your driver type and scanner model and click OK. The following Avision Capture Tool dialog box will be displayed.



3. Choose your desired file format from the File Format drop down list box. (Default is BMP, other choice includes TIFF, GIF, and JPEG.)

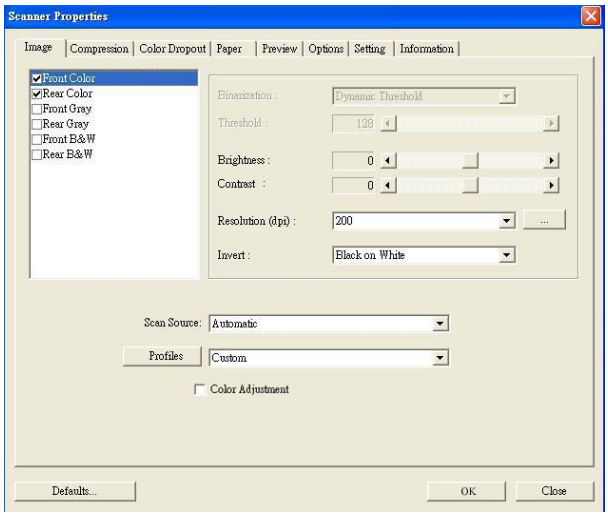
4. Type your desired folder name and file name in the File Path box. (Default is C:\My Scan\Image.)

Note: If you do not wish to save the scanned image, deselect the Save button since default is Save Enable. In this case, the thumbnail view will be disabled. And therefore, after viewing all the scanned images, only the last one will remain on the screen.

5. Click the Setup button (

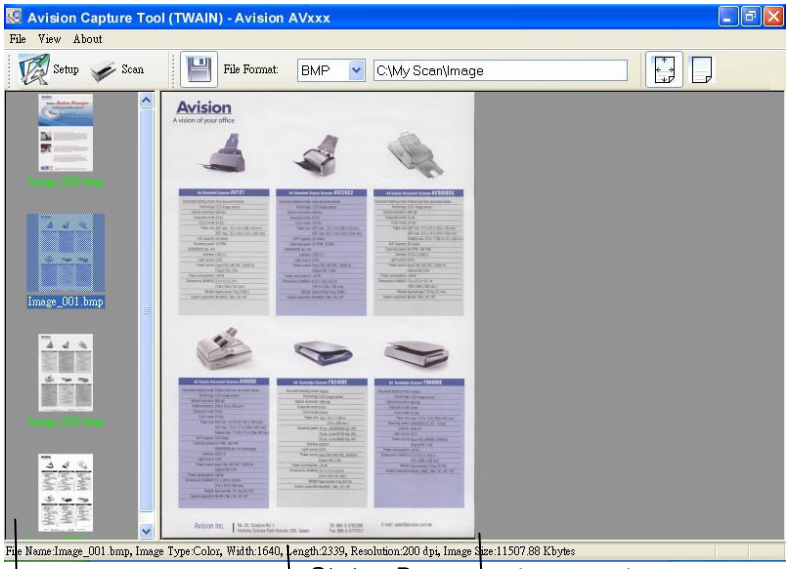
) or choose Setup from the File menu to prompt the Scanner Properties dialog box.

Image Selection Box



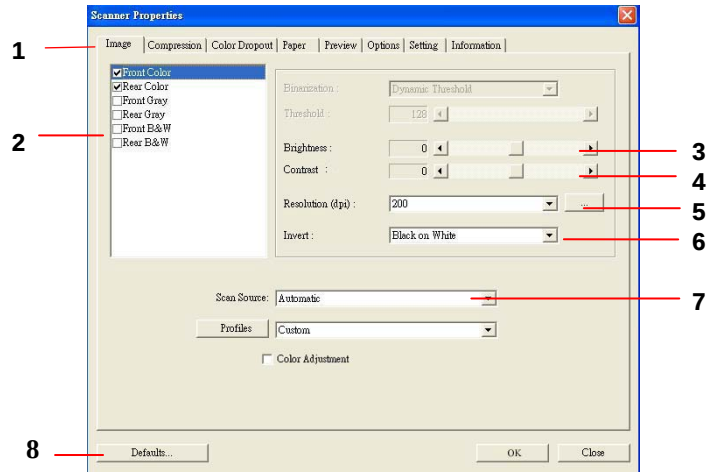
6. From the Image Selection Box, choose your desired image type for your scanned image. (Default is Front B&W) If you have a duplex scanner, choose Front and Rear to scan both sides of your document.
7. Click OK to quit the Scanner Properties dialog box. (To learn more details about the Scanner Properties dialog box, please see the subsequent chapter, *Using the Scanner Properties Dialog Box*.)
8. Place your document face down on the document glass or face up in the auto document feeder.
9. In the Scan Validation dialog box, click the Scan button (

) or choose Scan from the File menu.
10. The document will be scanned and displayed in the Scan Validation screen. After the scanned images have been displayed, your scanner installation verification is completed.



11. You can view the scanned image in Fit Page ( ) or Actual Size (100%) button ( ) from the Viewing toolbars at the right side.
12. Click the Close box or Quit from the File menu to exit the Scan Validation Tool.

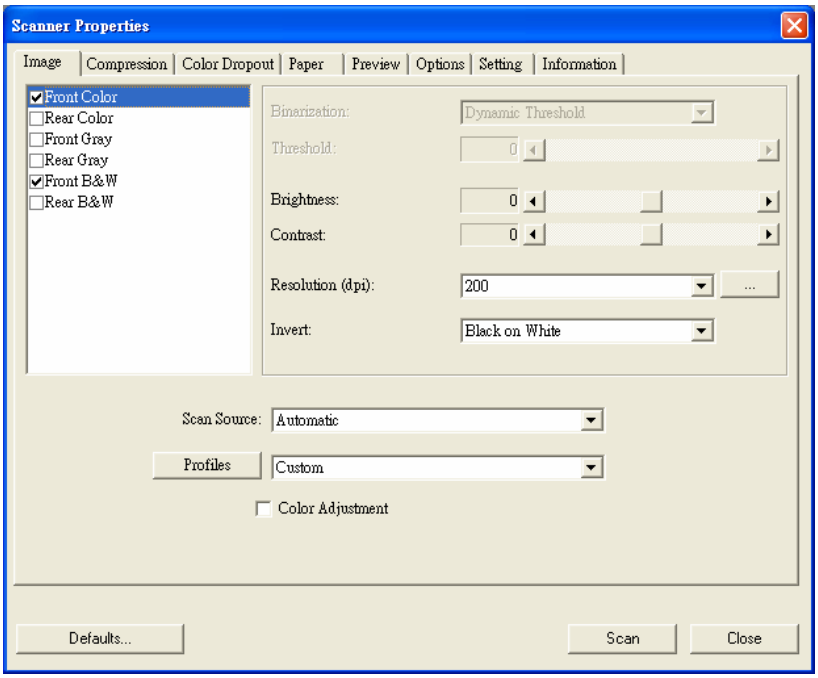
3.1.4 A Glance of the Scanner Properties Dialog Box



1. Tab Options	Choice: Image, Compression, Color Dropout, Paper, Options, Settings, Information.
2. Image Selection Box	Choose your image type and the side of document you wish to scan. Options vary based on type of scanner.
3. Brightness:	Adjust the brightness level from –100 to +100.
4. Contrast	Adjust the contrast level from –100 to +100.
5. Resolution	Determine the quality of the scanned image. The industry standard is 200 dpi.
6. Invert	Reverse the color of your scanned image.
7. Scan Source	**Choice:** Auto Document Feeder, Flatbed, Flatbed (Book), Automatic (varies due to different scanner model)
8. Defaults	Reset all values on the tabs to the factory default settings.

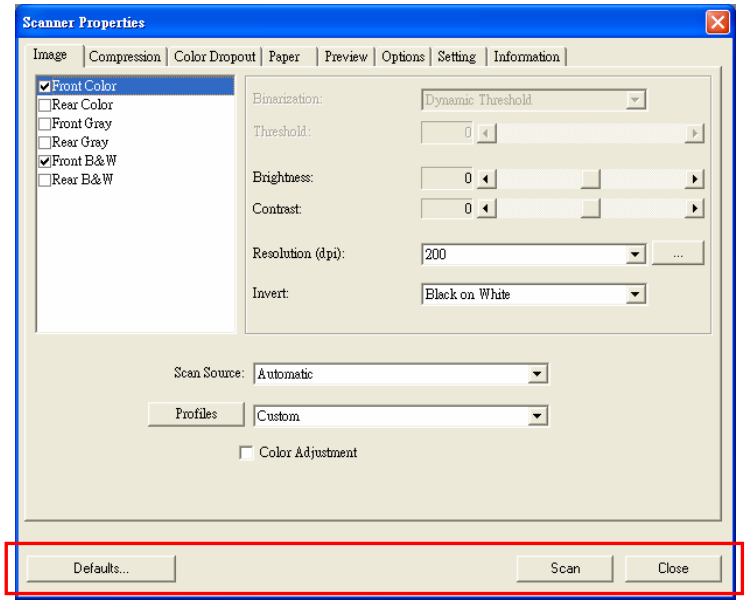
4. Using the Scanner Properties Dialog Box

The Scanner Properties dialog box allows you to configure the scanner's settings. It consists of several tabbed windows each of which will be described in this chapter.



The Scanner Properties dialog box

4.1 Buttons on the Scanner Properties Dialog Box



The buttons on the Scanner Properties dialog box

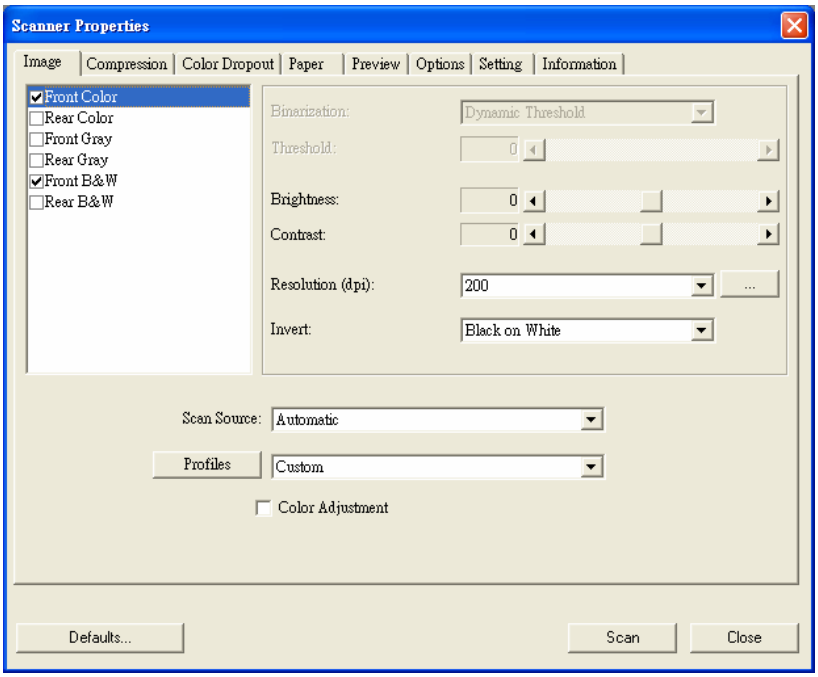
Buttons	Description
Defaults	Click the **Defaults** button, the factory default settings will be shown on each tab.
Scan	After all the scan settings are satisfactory, click the **Scan** button to start scanning your document.
Close	Click the **Close** button to leave the Scanner Properties dialog box.

The following table shows the default settings :

Tab name	Default settings
Image	Image : Front B&W Binarization : Dynamic Threshold Resolution : 200 dpi Invert : Blank on White Scan Source : Auto Document Feeder Threshold : None Brightness : None Contrast : None
Compression	None
Color Dropout	None
Paper	Cropping : Automatic Deskew : Yes Orientation : Portrait OverScan : 0.00 Multifeed Detection : None Unit : Inch
Options	Rotation Degrees : None Blank Page Removal : None Edge Fill : White , 0 mm Image Control Option : None
Setting	Enable Energy Saver : Enable, 15 minutes after last scan action Show Scanning Progress : Yes Show Warning Message : Yes Save Settings after Closing : Yes

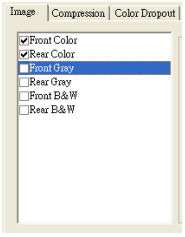
4.2 The Image Tab

The Image tab allows you to choose the front side and (or) the rear side of your document, the type of image, and to set several basic scan settings. Note that except for the resolution, you can set individual scan settings for the front side and the rear side. For example, all settings in the Image tab, Compression tab, Color Dropout tab can be set individually for the front and the rear side. However, the settings in the Paper tab, the Option tab, and the Setting tab have to be set the same for the front and rear side.



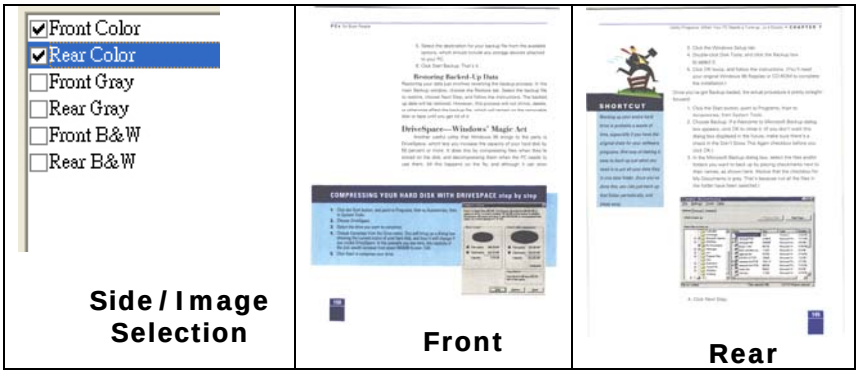
The Image tab dialog box

4.2.1 The Image Selection Box



The **Image Selection** box includes the image type and document side option. If you wish to scan both the front side and the rear side of your color document, you can check both Front Color and Rear Color at the same time. Note the options vary based on type of scanner.

Example 1：Scanning a two-sided color document, both sides in color



Example 2：Scanning a two-sided color document, one in B&W(Drop Blue Color：Threshold：10, Background：79), the other in color

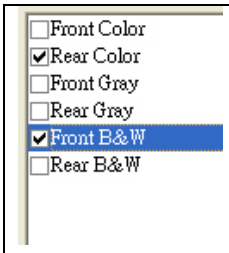
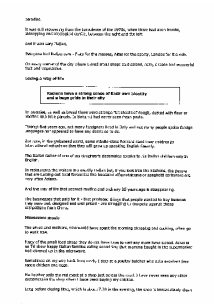
 **Side / Image Selection**	**Front**	**Rear**

Image Type	Description
Color	Choose Color if you wish to scan a color image for your original in color.
Gray	Choose Gray image if your original contains actual shades of gray.
B&W	Choose B&W if your original contains only text pencil or ink sketch.



B&W

Gray

Color

4.2.2 Other Image Options

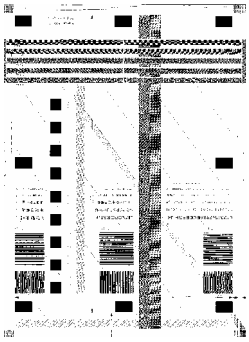
Binarization

This is the process of converting a grayscale or color image to a bi-tonal image. There are several different methods of performing this conversion. Two of the options are **Dynamic Threshold** and **Fixed Processing**.

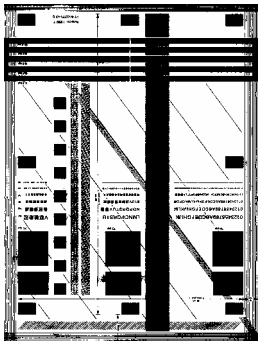
Dynamic Threshold: Selecting **Dynamic Threshold** allows the scanner to dynamically evaluate each document to determine the optimal threshold value to produce the highest quality image. This is used to scan mixed document containing faint text, shaded background, or color background with a single setting. If Dynamic Threshold is selected, Threshold, Brightness, and Contrast are not available.

Fixed Processing: Used for black-and-white and other high contrast documents. A single level is set to determine the black-and-white transition. The threshold is programmable over the entire density range. **Fixed Processing** sets Contrast to 0. If **Fixed Processing** is selected, Contrast is not available.

Threshold Used to convert a grayscale image to a bi-tonal image. The value ranges from 0 to 255. A low threshold value produces a lighter image, and can be used to subdue backgrounds and subtle, unneeded information. A high threshold value produces a darker image, and can be used to help pick up faint images.
Adjust the threshold setting by dragging the Threshold sliding bar to the left or right to achieve the desired threshold setting.



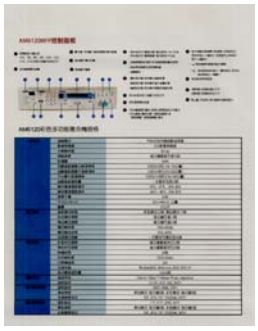
200 dpi, Threshold:80, Brightness: 0



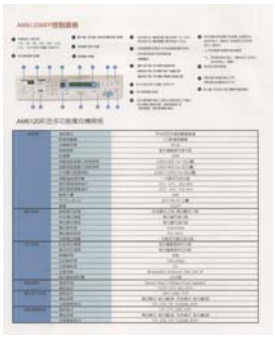
200 dpi, Threshold:170, Brightness: 0

Brightness Adjusts the lightness or darkness of an image. The higher the value, the brighter the image. Drag the slider to the right or left to increase or decrease the brightness. The range is from –100 to +100.

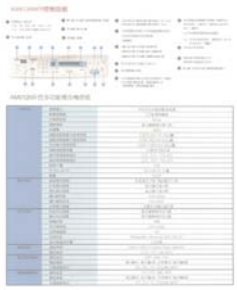
Contrast Adjusts the range between the darkest and the lightest shades in the image. The higher the contrast, the bigger the different grayscale. Drag the slider to the right or left to increase or decrease the contrast. The range is from –100 to +100.



Brightness: -50

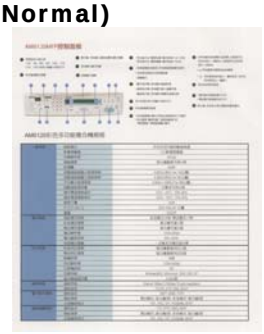


Brightness: 0 (Normal)

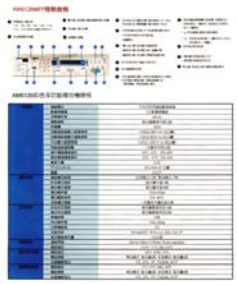


Brightness: +50

Contrast: -50



Contrast: 0 (Normal)



Contrast: +50

Resolution

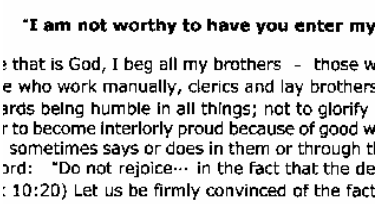
A good control of the resolution results a good detail of an image that scans. The resolution is measured by dots per inch (dpi). Normally, the greater the dpi number, the higher the resolution and the image file size. Be aware that greater resolution takes more time to scan, and more disk space for the scanning image. For your information, an A4 size color image scanned at 300 dpi at True Color mode consumes approximately 25 MB of disk space. A higher resolution (usually means over 600 dpi) is only recommended when you need to scan a small area at True Color mode.

Choose a resolution value from the drop down list. The default value is 200 dpi. Available resolutions are 75, 100, 150, 200,300, 400 and 600. Or you may choose your desired value by clicking the box in the right side of the drop down list and press the arrow key to select your desired value and then click the Add button to include it in the drop down list.

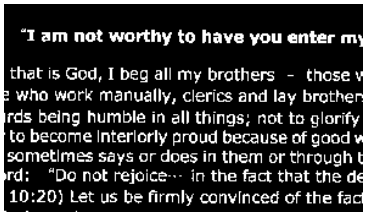
Resolution: 75 dpi

Resolution: 150 dpi

Invert Reverses the brightness and the colors in the image. The default setting is Black on a White background. Reverse mode is White on a Black background. For color images, each pixel will be changed into its complementary color at the command of Invert.


"I am not worthy to have you enter my
that is God, I beg all my brothers - those w
who work manually, clerics and lay brothers
ards being humble in all things; not to glorify
to become interiorly proud because of good w
sometimes says or does in them or through th
ord: "Do not rejoice··· in the fact that the de
10:20) Let us be firmly convinced of the fact

Black on White


"I am not worthy to have you enter my
that is God, I beg all my brothers - those w
who work manually, clerics and lay brother
rds being humble in all things; not to glorify
to become interiorly proud because of good w
sometimes says or does in them or through t
rd: "Do not rejoice··· in the fact that the de
10:20) Let us be firmly convinced of the fact

White on Black

Scan Source	**Choice:** • **Auto Document Feeder:** Used to scan multiple pages. • **Flatbed:** Used to scan a single page. For example, pages from newspaper clipping, paper with wrinkles or curls. • **Flatbed (book):** Used to scan several inside pages from book. • **Automatic:** Allow the scanner automatically set its scan source. If **Automatic** is selected and there is document in both the auto document feeder (ADF) and the flatbed, then the scan source will be automatically set to ADF. If **Automatic** is selected and there is document only in flatbed, then the scan source will be set to flatbed. Note the options vary based on type of scanner.

Color Adjustment Adjusts the color quality of the image so that it comes close to that of the original. This function uses default parameters to adjust the image.

Normal

After Color Adjustment

4.2.3 Scanning color images

The following options are available for scanning color images.

- Brightness
- Contrast
- Resolution
- Invert

4.2.4 Scanning grayscale images

The following options are available for scanning gray images.

- Brightness
- Contrast
- Resolution
- Invert

4.2.5 Scanning B&W images

The following options are available for scanning B&W images.

- Binarization (Dynamic Threshold)
- Resolution
- Invert

Or

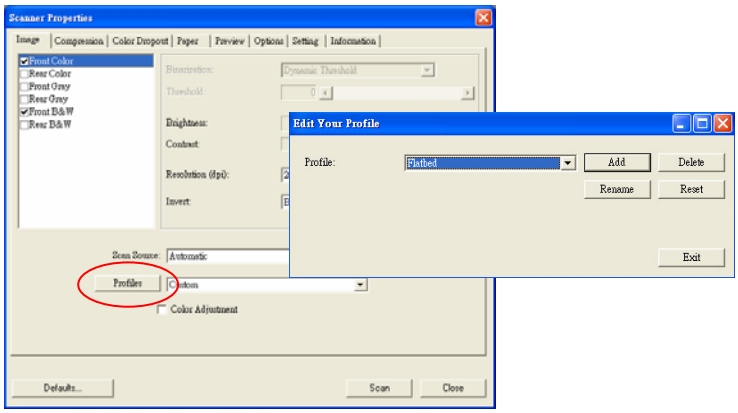
- Binarization (Fix Processing)
- Threshold
- Brightness
- Resolution
- Invert

4.2.6 Editing Profiles

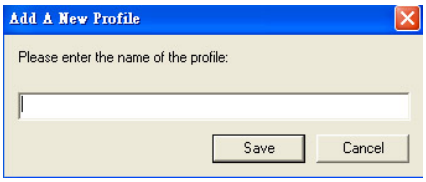
The Scanner Properties dialog box allows you to change and save your frequently used scan settings into a profile. You can edit these profiles by renaming or deleting them.

To add a new profile,

1. Customize your settings. (For example, change your resolution, image type, cropping method, scan size, or other scan settings.)
2. Click the Image tab and then choose "Profiles" to prompt the "Edit Your Profile" dialog box.



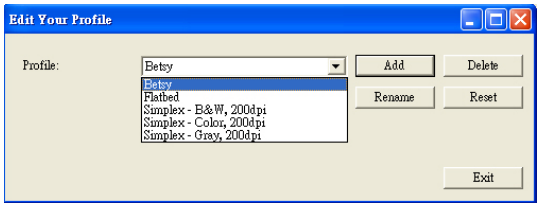
3. Click "Add" to enter the name of the profile and then choose "Save".



4. The new profile will be saved and shown in the "Profiles" dropdown list box.

To load a profile,

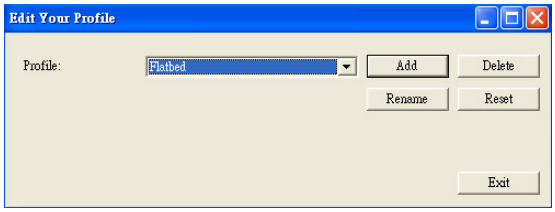
1. From the Image tab dialog box, choose your favorable profile from the “Profiles” dropdown list box.



2. Your favorable profile will be immediately loaded and displayed on Scanner Properties dialog box.

To delete a profile,

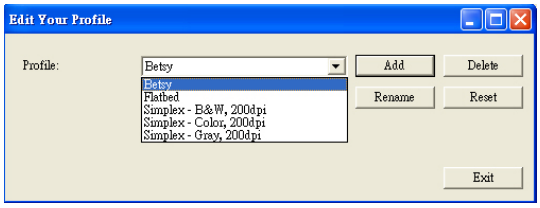
1. From the Image tab dialog box, click “Profiles” to prompt the Edit Your Profile dialog box.



2. Choose the profile you want to delete from the dropdown list box.
3. Click “Delete”. A Confirm message “Are you sure you want to delete this profile?” is prompted.
4. Choose “Yes” to delete or “Cancel” to quit.

To rename a profile,

1. From the Image tab dialog box, click "Profiles" to prompt the Edit Your Profile dialog box.



2. Choose the profile you want to rename from the dropdown list box and then click the Rename button.

3. Enter new name for the profile.

4. Choose "Save" to save the new profile or "Cancel" to quit.

Note:
The preset default profiles include Flatbed, Simplex-B&W, 200 dpi, Simplex-Gray, 200 dpi, Simplex-Color, 200 dpi, Duplex-B&W, 200 dpi, Duplex-Gray, 200 dpi, Duplex-Color, 200 dpi. If you have a simplex or a sheetfed scanner, the duplex or the flatbed option will not be available.

4.3 The Compression Tab

The Compression tab allows you to compress your scanned image and choose the level of compression. Bi-tonal images are normally compressed using CCITT standard called Group 4 (G4). Color and grayscale images are often compressed using JPEG technology. Move the **JPEG Quality** slider to the right or left to increase or decrease the level of compression. Note the greater the compression level, the lower image quality. Default is 50%.

Note that the compression depends on your image editing application. If your image editing application does not support the type of compression format, then either a warning message will appear or the image quality of the compressed file will not be acceptable.

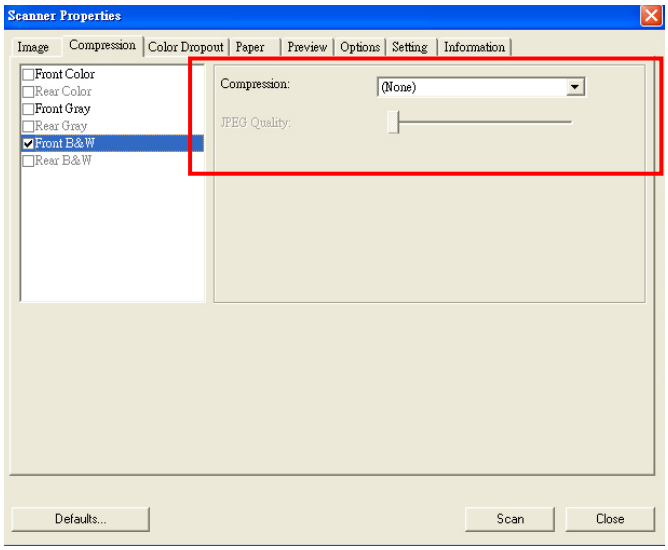
JPEG (Joint Photographic Editor Group). This group developed and lent their name to a file compression standard for color and grayscale images that is widely used by scanners, and software applications. On Microsoft Windows-based systems, a file with the extension .jpg has normally been compressed using this standard.

For scanning color or gray images, the following compressions are available:

- None
- JPEG

For scanning B&W images, the following compressions are available:

- None
- G4



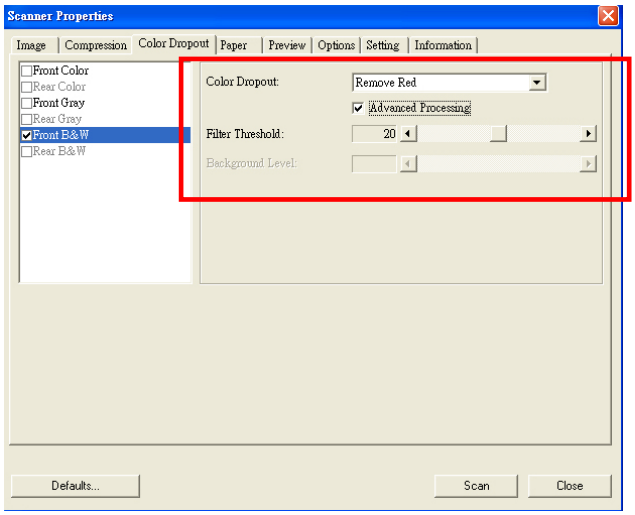
The Compression tab dialog box

4.4 The Color Dropout Tab

4.4.1 Color Dropout Selection

Color Dropout tab allows you to drop either of the red, blue, or green color in your scanned image. If your image contains red color watermark or background, choose the R (Red) channel then any red watermark or background will be removed. This feature is used to sharpen your text when using OCR (Optical Character Recognition) software.

Note that this function supports only black & white and gray images. Therefore, be sure to choose any black & white or gray image type while applying this function.



The Color Dropout dialog box

4.4.2 Other Color Dropout Options

Advanced Processing provides two options that can adjust your scanned image in the best optimal result.

Filter Threshold	This value is used to determine the color which will be dropped out. A lower value will drop more of the selected color out, while a higher value will leave more of the selected color in.
Background Level	The pixel which is higher than the background value will be adjusted to the lightest point. Adjust the value for both the Filter Threshold and Background Level to produce the best optimal result.

Example, slightly adjusting the background value makes your text more clear.

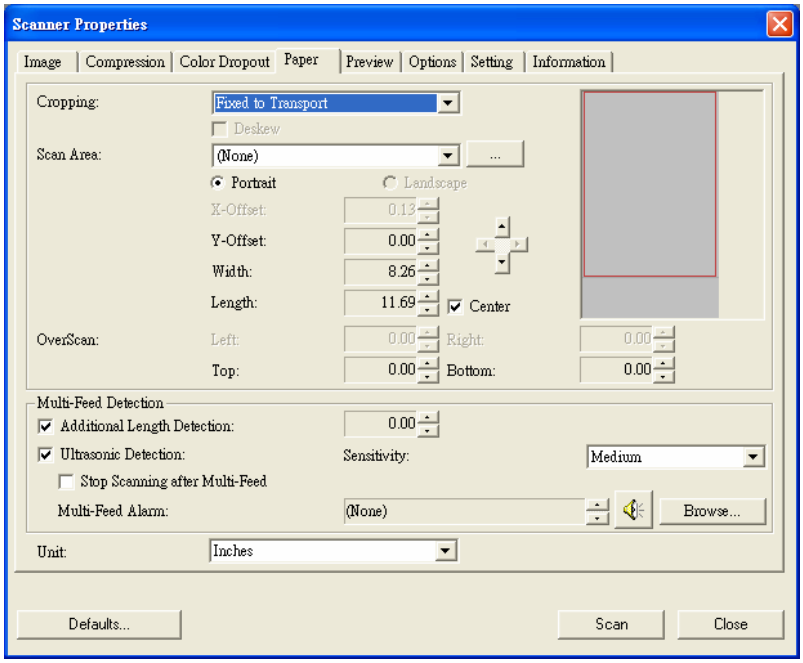
Original

Remove Blue, Threshold: 20, Background: 255

Remove Blue, Threshold: 20, Background Level: 210

4.5 The Paper Tab

The Paper tab allows you to define values relating to image output (i.e., Auto Crop or not, Scan Area, OverScan, Multi-Feed Detection).



The Paper tab dialog box

4.5.1 Cropping

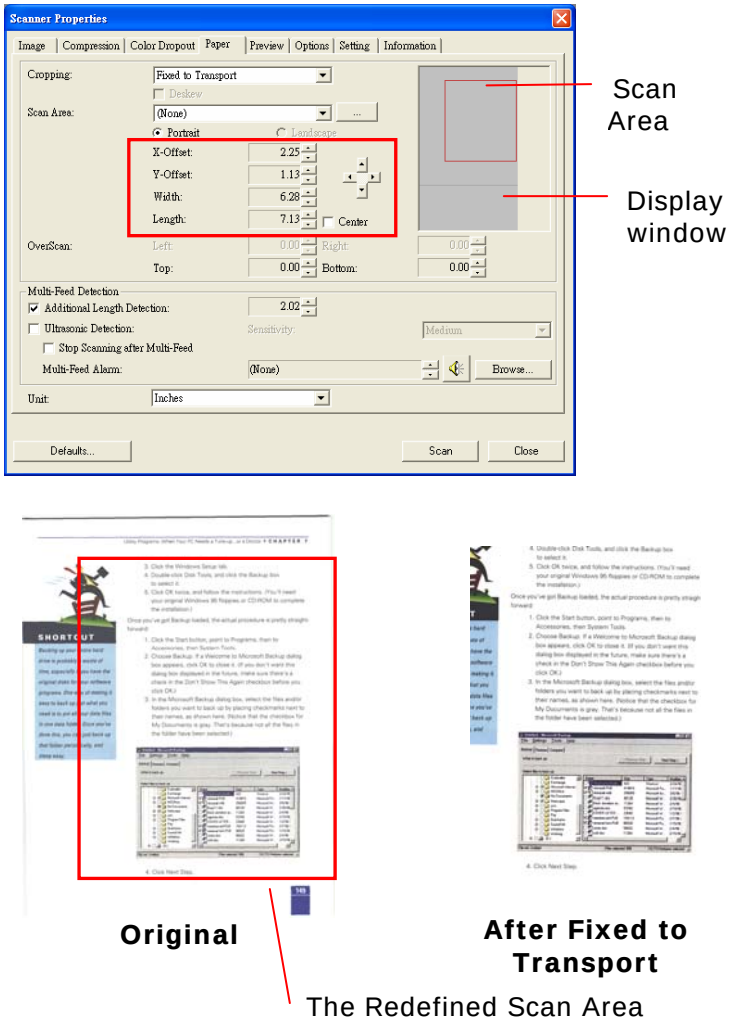
Cropping allows you to capture a portion of the document being scanned. **Choice: Automatic, Fixed to Transport, EOP (End of Page) Detection.**

Options	Description
Automatic	Automatic adjusts the cropping window according to different document sizes. Use this option for batches of mixed-sized documents.
Fixed to Transport	This feature allows you to define the area or zone to be imaged. Use for batches of same-sized documents. If you select this option, you can use the arrow keys to define the x and y offset values, width and length to redefine your scanned area. The Display window will show image placement as you change the values.
EOP (End of Page) Detection	This feature allows you to define the area or zone to be imaged. Use for batches of same-width but different length documents. If you select this option, you can use the arrow keys to define the x and y offset values, width and length to redefine your scanned area. The Display window will show image placement as you change the values.

The following options are only available when **Fixed to Transport** is selected.

- **X-Offset** — the distance from the left end of the scanner to the left edge of the scanning area.
- **Y-Offset** — the position from the top end of the document to the top end of the scanning area.
- **Width** — the width of the scanning area.
- **Length** — the length of the scanning area.
- **Center:** automatically calculates the x-offset for center-fed feeding based upon document size selected.
- — relocate the scan area by click the arrow key on the cross sign while retain the scan size. View the result from the Display window.

Example： Redefine your scan area (x-offset: 2.25 inches ; y-offset:1.13 inches)



Original

After Fixed to Transport

The Redefined Scan Area

4.5.2 Other Paper Selection

Deskew

Use this option to automatically deskew a document.

Note: If the skew angle is too great, some of the image may be cut off.

Scan Area

Choose your desired paper size with the drop-down list box. Or you may select a custom paper size by clicking the **Scan Area** box and then click **Add** to include in the choice.

Choice: None, US Letter- 8.5"x 11", US Legal – 8.5" x 14", ISO A4 – 21 x 29.7 cm, ISO A5 – 14.8 x 21 cm, ISO A6 – 10.5 x 14.8cm, ISO A7 – 7.4 x 10/5 cm, ISO B5 – 17.6 x 25 cm, ISO B6 – 12.5 x 17.6 cm, ISO B7 – 8.8 x 12.5 cm, JIS B5 – 18.2 x 25.7 cm, JIS B6 – 12.8 x 18.2 cm, JIS B7 – 9.1 x 12.8 cm, Scanner Maximum, Long Page.

Long Page:
When you need to scan documents whose length exceeds scanner maximum, please choose Long Page. Note if Long Page is selected, the Multi-Feed Detection will not be available. Options: Unknown Length, Enter Length (Note: This option varies due to type of scanner.)

Choose “Unknown Length” if you have a batch of long page document with unknown length. Choose “Enter Length” to enter the length and width of your documents or your desired scan size on documents. This is useful when you have a batch of documents with the same scan size or a batch of same-sized documents.

OverScan

Overscan allows you to add a specific margin at top and bottom or right and left (Options vary based on the type of scanner) of the edge of the image. This is used to reduce possible corner clipping on the skewed images and often applied to a batch of skewed document to be scanned in the auto document feeder. Select a value between 0 and +5 mm. Note the overscan result will not be shown in the Display window and that the availability of the function varies based on type of scanner.

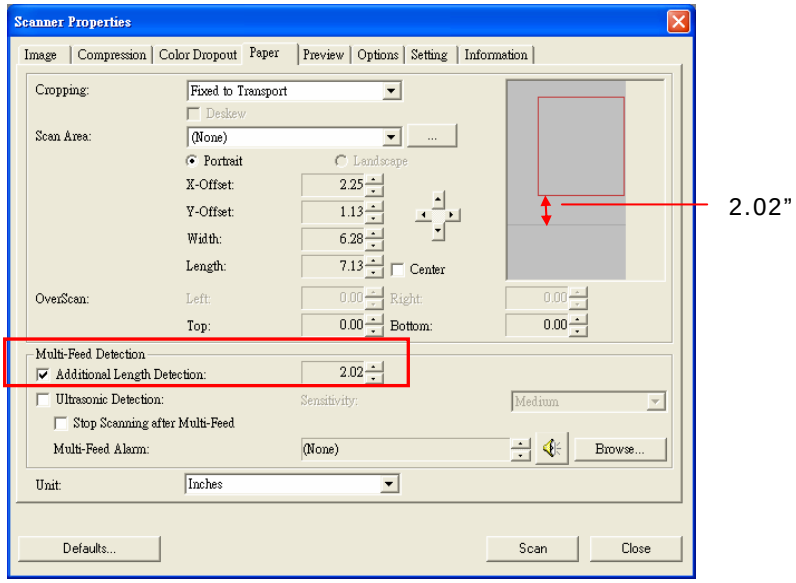
Multi-Feed Detection

Multi-Feed Detection allows you to detect overlapped document that go through the auto document feeder. Multi-Feed usually occurs due to stapled documents, adhesives on documents, or electro-statically charged document. Note： The availability of the function varies based on type of scanner.

Additional Length Detection

Additional Length Detection allows you to define the length of document being multi-fed. This value indicates the additional length exceeding your scan area. The Display window will show the size of the document as you change the value. A value of 0 indicates no additional length detection. The Additional Length Detection is best used when scanning same-size documents in the auto document feeder.

Example：Additional Length Detection：Set Additional Length to be 2.02 inches



Ultrasonic Detection

Ultrasonic Detection allows you to set overlapped document by detecting paper thickness between documents. Note： The availability of the function varies based on type of scanner.

There are two options available if Multi-Feed is detected.

- **Stop Scanning after Multi-Feed**

  If this is selected, the scanner will stop the feeder and display the following Warning dialog box if multi-feed is detected.

Action:

1. Follow the instruction on the Warning dialog box to remove the rest pages on the feeder.
2. Click OK to close the Warning dialog box.
3. Scan the rest pages.

- **Sound Alarm on Multi-Feed**

  If a wave file is added, the scanner will make a sound alarm if multi-feed is detected yet no Warning dialog box will be displayed.

  If "Stop Scanning after Multi-Feed" is selected, the scanner will stop the feeder.

  If "Stop Scanning after Multi-Feed" has not been selected, the scanner will continue to scan till the end of your document.

  Action:

  1. If "Stop Scanning after Multi-Feed" is selected, follow the action described in the preceding section "Stop Scanning after Multi-Feed" on the previous page to complete your job.
  2. If "Stop Scanning after Multi-Feed" has not been selected, rescan the pages where multi-feed is detected.

How to add the sound alarm：

1. Click the Browse button on the right side of the speaker icon. The Open dialog box appears.
2. Choose your wave file.
3. Click the Open button. The wave file is added.

Units

Defines the primary measurement system. **Inches, Millimeters,** and **Pixels** are available.

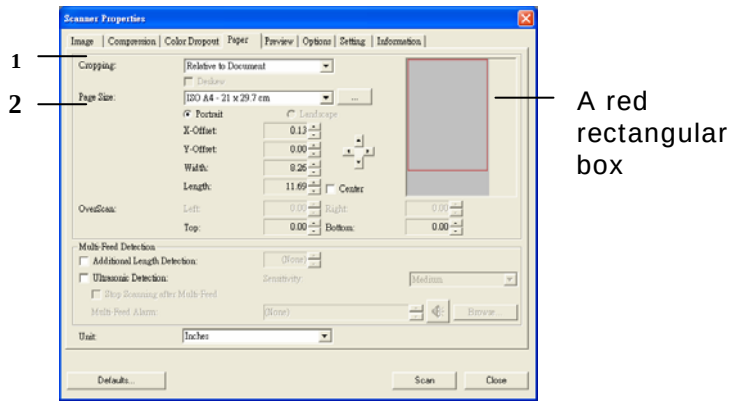
4.5.3 Relative to Document

Relative to Document: (used for batches of same-sized documents)

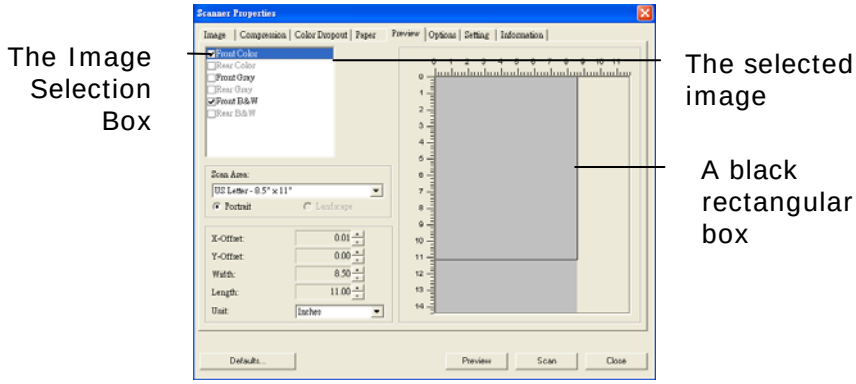
This option allows you to crop different areas on your documents and deliver these images in B&W, Gray, or Color separately. For example, there are applications which require you to store the entire document in B&W and a part of the document in color to save storage space. This is useful for documents where a photograph, or signature appears in a consistent area on the document such as resumes, and so on.

The following procedure describes how to reproduce the entire document in B&W and a portion of document (picture) in color.

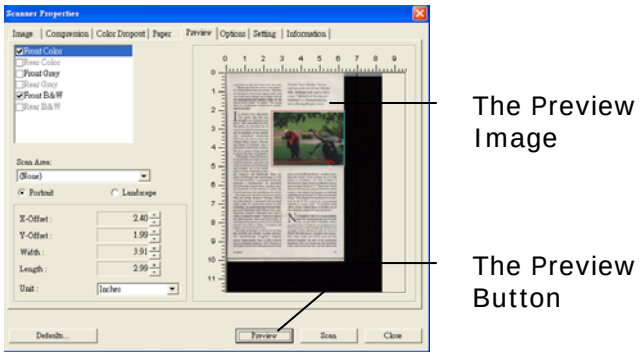
1. On the Paper tab, choose “Relative to Document” or “Fixed to Transport” from the Cropping option.
2. Choose your scan size from the Scan Area option. The selected scan size will be displayed in a red rectangular box. This is also the scan size of your entire document. (For example, ISO B5. If you have not chosen a scan area and leave the selection as None, then the default area will be the scanner’s maximum.)



3. Click the Preview tab to display the Preview window. A black rectangular box appears to indicate the max. scan size your have just selected.



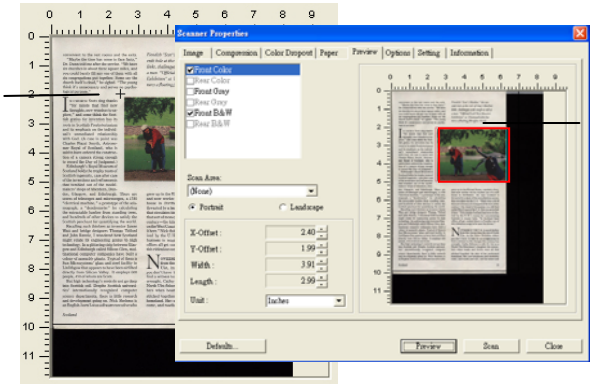
4. Click the Preview button to view the entire image in low resolution to correctly crop your relative scan area.



5. Select image type from the Image Selection box. The selected image will appear in highlighted color. (For example, Front Color)

6. Place your cursor on the Preview window and click your left mouse button. A cross sign will appear as illustrated. Create your relative scan size diagonally by dragging the left mouse button to your preferable size. The selected area will appear in a red box as illustrated.

A Cross Sign



The Relative Area

7. Check the B&W image from the Image Selection box to scan the entire document.
8. Click the Scan button to start scanning the document in two image types and sizes. (See the result in below.)

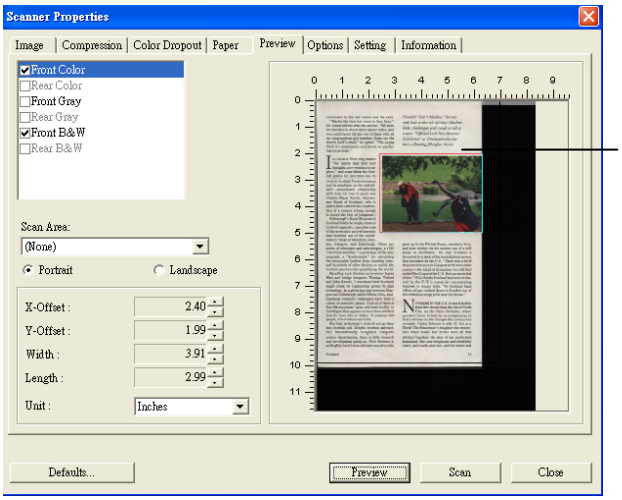
The entire document in B&W

The relative area in color

4.6 The Preview Tab

The Preview tab allows you to preview (a low-resolution scan) your image before final scan. This preview image lets you allocate your scan area. You can choose your scan area by the "Scan Area" drop down list box or placing your cursor on the Display window and dragging it diagonally on the Display window. Then, a red rectangle box will appear to indicate the selected area.

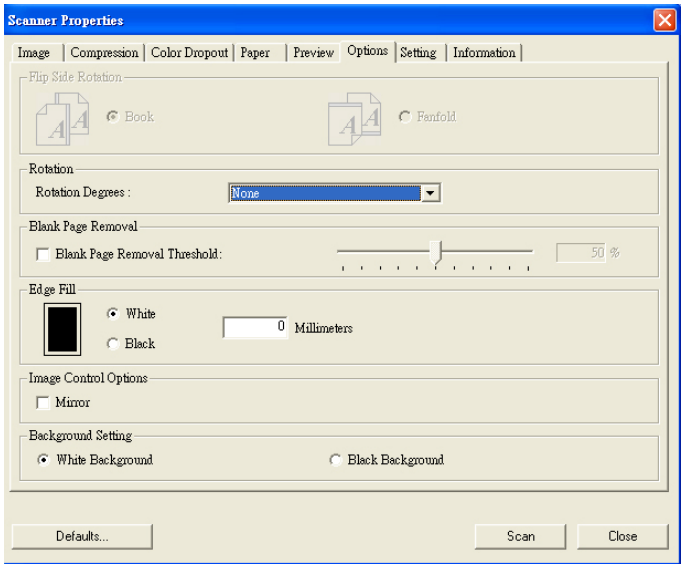
Note: If you choose "Automatic Cropping" on the "Paper Tab", then to select a scan area on the Preview tab is not allowed.



The Preview Tab

4.7 The Options Tab

The Options tab allows you to set following additional image processing settings.



The Option tab dialog box

Flip Side Rotation

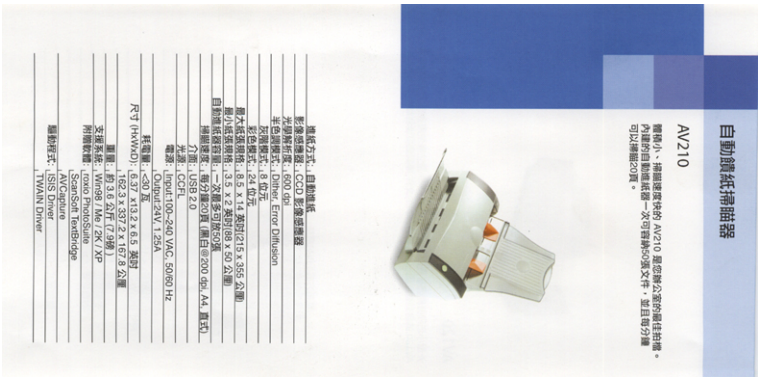
Select "fanfold" to rotate the image of the reverse side to 180 degrees.

This is applied to double-sided document which are viewed in portrait are sometime fed into the scanner in landscape or vice versa.

Choice: Book, Fanfold.

If "Book" is selected, the image of the reverse side will not be rotated.

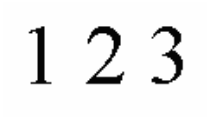
The following illustration shows the documents which should be viewed in portrait are fed into the scanner in landscape



Rotate Image

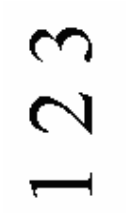
Choose the rotation angle from the drop down list if you wish to rotate your scanned image.

Choice: None, 90°CW(clockwise), 90°CCW(counter clockwise), 180°.

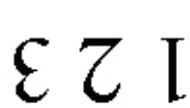


Original

Rotate 90°CW



Rotate 90°CCW



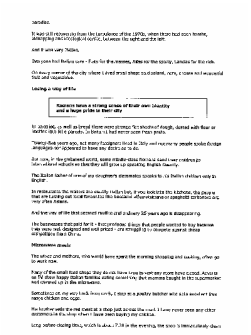
Rotate 180°

Blank Page Removal

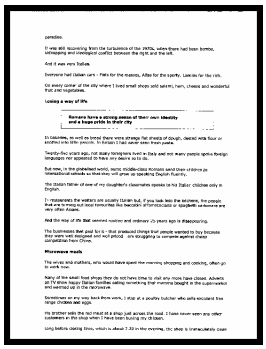
Check if you wish to remove the blank page and move the slider to the left or right to your desired threshold.

Edge Fill

Check White or Black if you wish to add white or black edge on the border of your scanned image. Enter the value from 0 to 5 mm. Default value is 0.



Original



Edge Fill: 5mm (Black)

Image Control Option

Check the Mirror box if you wish to reverse the right and left side of your image.

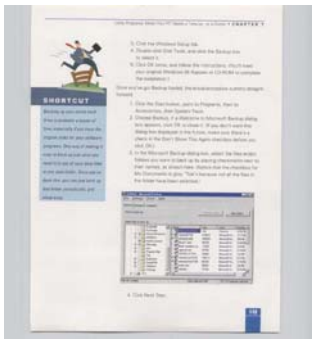
Original

The Mirror Effect

Background Setting

This option allows you to set your scan background.
Choice: White Background, Black Background.

**This option varies based on type of scanner and is available for the front page in the ADF (auto document feeder) only. For the rear page, only the white background is available.*

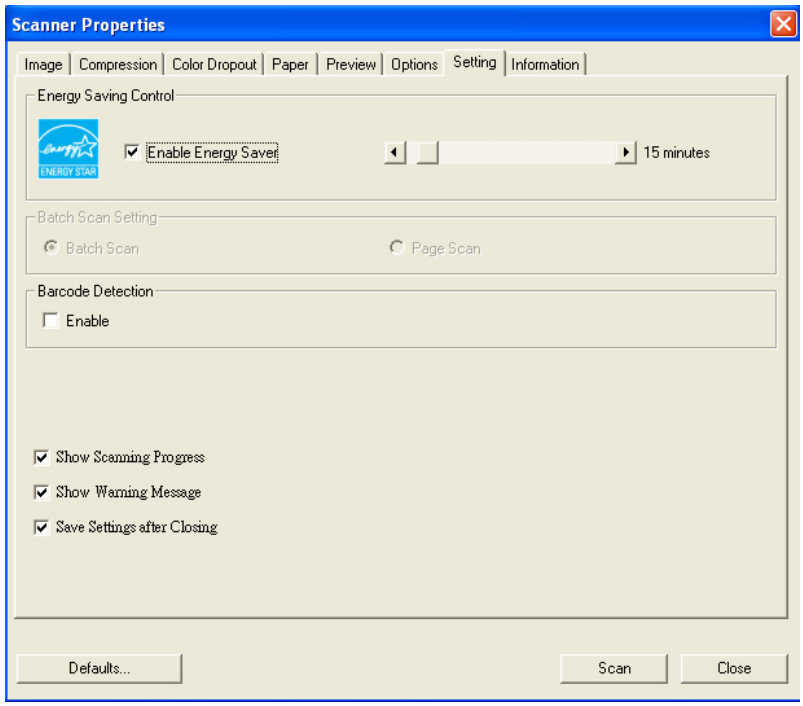


White Background

Black Background

4.8 The Setting Tab

The Setting tab allows you to set the following settings:



The Setting tab dialog box

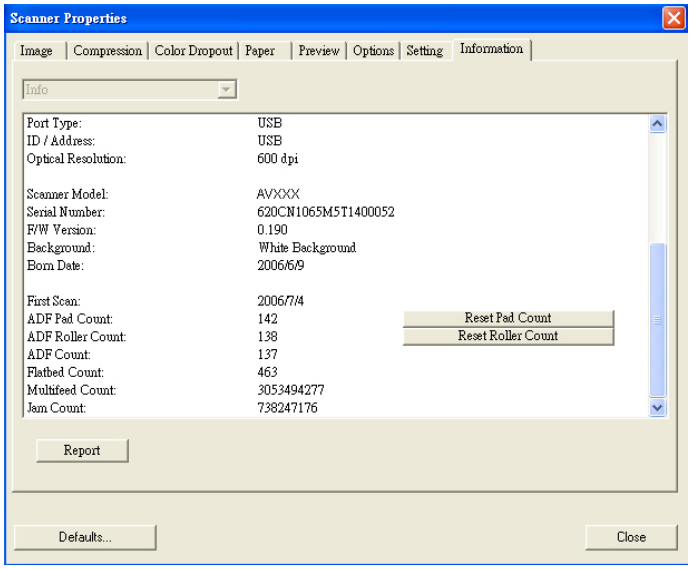
Energy Saving Control	Check the **Enable Energy Saver** box and move the slider to the right to set the amount of time to start the energy saver after your last action. The range is from 1 to 240 minutes. The default is 15 minutes.

Batch Scan Setting	**•Batch Scan** To increase the scanning speed, the scanner first scans a few pages of your document and then sends these scanning data to the application. Therefore, during scanning, the numbers of pages been scanned on the scanner is somehow different with the numbers of pages displayed on your computer screen. Choose this mode if you wish to complete your scanning task at the fastest speed. **•Page Scan** If you choose Page Scan, during scanning, the scanner will first scan only one page of your document and then send the scanned data to the application and then scan the next page and send the next data to the application, and so on. Therefore, in this mode, the scanning speed is slower yet this helps to keep the same scanning progress between the scanner and your computer screen.
Barcode Detection	Check this option to enable detecting and recognizing barcode in your document. After the detecting process, an avbarcode.ini file will be generated and stored in your system drive, for example, Windows\avbarcode.ini. Note: The availability of this feature varies based on type of scanner.

Show Scanning Progress	Check and the scanning progress bar will be shown during scanning.
Show Warning Message	Check to show the warning messages such as "ADF pad count exceeds 50,000 scans (the number varies based on type of scanner). Please replace the ADF pad and reset the pad count."
Save Settings after Closing	Check to save your scanner properties settings after leaving the dialog box. Next time when you open the Scanner Properties dialog box, the previously saved settings will be shown.

4.9 The Information Tab

The Information tab displays the following system and scanner information.



The Information tab dialog box

The "Report" button :

If you encounter any error message while using the scanner, click the Report button. A report.txt file (C:\AVxxx) will be generated. Please send this file to the nearest service center for trouble shooting.

The "Reset Pad Count" button」:

After scanning approximately 50,000 pages (the number varies based on type of scanner) through the Auto Document Feeder (ADF), the ADF pad may be worn out and you may experience problems with document feeding. In this case, it is highly recommended to replace the ADF pad with a new one. (Please refer to the manual for proper replacing procedure.) For ordering the ADF pad, please consult your nearest dealer. After replacing the ADF pad, click the "**Reset Pad Count**" button to reset the pad count.

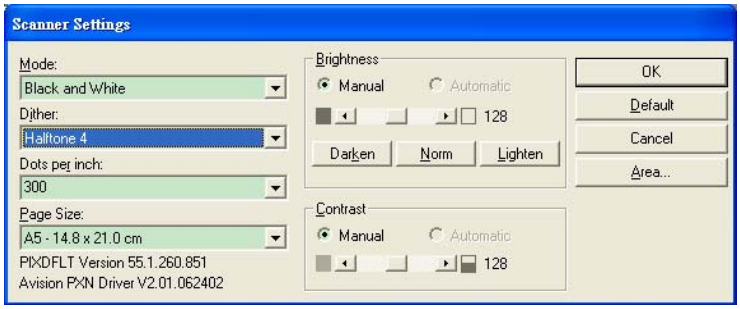
The "Reset Roller Count" button」:

After scanning approximately 200,000 pages (the number varies based on type of scanner) through the ADF, the ADF roller may be worn out and you may experience problems with document feeding. In this case, it is highly recommended to replace the ADF roller with a new one. (Note the replacement of the ADF roller has to be performed only by authorized service center. Therefore, please return your scanner for roller replacement.) After replacing the ADF roller, click the "**Reset Roller Count**" button to reset the roller count.

Note:
The lifetime and the replacing procedure vary based on type of scanner. Please consult your nearest dealer for more details.

5. ISIS Interface Operation

The ISIS driver operation method is similar to the TWAIN's. Every function on the ISIS interface screen is briefly described as below:



Mode: Select one of scan modes, including B&W, gray, color options.

Dither: 5 halftone levels available, can be disabled.

Dots per inch: Select your desired resolution.

Paper Size: Select your desired paper size.

Brightness: Adjust your scan image brightness or darkness.

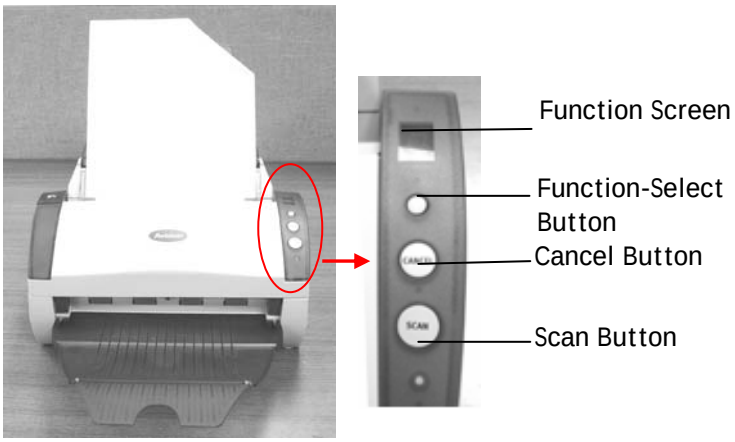
Contrast: Adjust the range between the darkest and the lightest shades in the image.

Default: Click to reset all settings.

Area: Select your desired scan area or position.

6. Using the Buttons

The following picture shows the 3 buttons and 1 function screen on the scanner.



6.1 Installing Button Manager

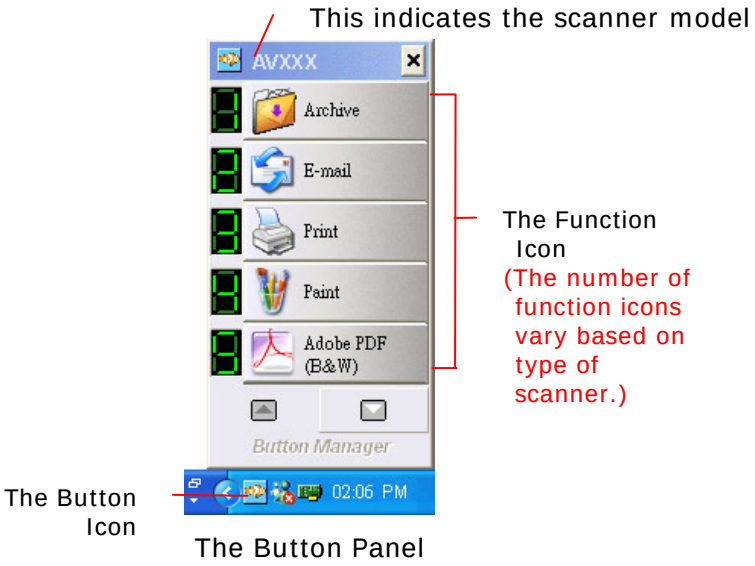
To use the buttons on the scanner, you need to install the Button Manager. To ensure the Button Manager work properly, please FIRST install Button Manager before installing the scanner driver.

Installing the Button Manager is easy. Insert the supplied CD to your CD-ROM drive and follow the instructions on the screen to complete the installation of the Button Manager.

Button Manager provides you an easy way to scan your document and then link the scanned image to your designated software application. All this can be done by a simple touch of the button on the scanner. Yet, before you scan, it is recommended to check the button configurations first to ensure a proper file format and a destination application.

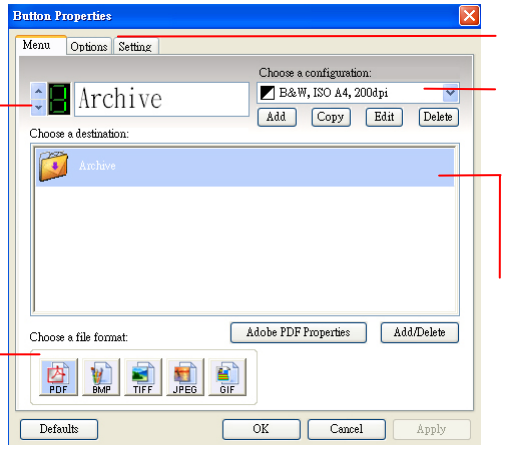
6.2 Checking the Button Configurations Before Scanning

1. Click the Scan button on the scanner.
2. The Button Panel is displayed in the Windows System Tray at the bottom right corner of your computer screen.



The Button Panel

3. The Button Panel shows the first five scanning buttons. Right-click the button (function) you wish to check. The Button Properties window appears.



Click to select options or setting.

The button number and name.

The scan settings for the selected button.

The file format of the scanned image. (*The options vary based on type of scanner.)

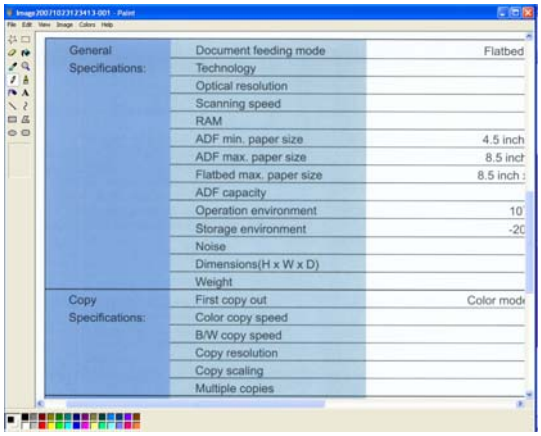
The destination application. (This is the application that opens after you have finished scanning.)

The default setting is indicated in highlighted color. If you wish to change the setting, use this window to reset the setting for the file format, destination application, or other scan settings. See "Configuring the Button" in the subsequent section to reset the settings.

4. Click the OK button to leave the window.

6.3 Scanning From One Touch of the Buttons

1. Adjust the paper guide for the width of paper and load the document with their tops into the automatic document feeder.
2. Check the number on the LED screen to ensure if you are selecting the proper scan settings and destination application. (For example, if you want to scan with button #4, which open Microsoft Paint and display the scanned image in the main window of Microsoft Paint, the LED screen should show 4).
3. Press the Scan button on scanner.
4. After the scanning is finished, the Microsoft Paint software will be launched and the scanned image appears in the main window of Microsoft Paint as below.



Note:
For details information on how to use the Button Manager, please refer to the user's manual in the supplied CD.

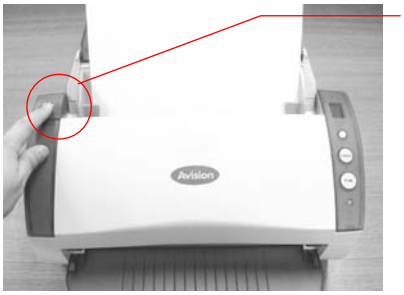
7. Maintenance

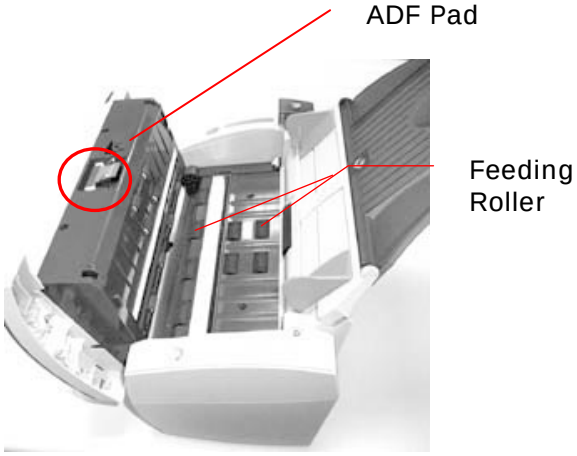
7.1 Cleaning the ADF

From time to time the pad assembly and feeding rollers may become contaminated with ink, toner particles or paper dust. In this case the scanner may not feed documents smoothly. If this occurs please follow the cleaning procedures to return your machine to its original state.

The Cleaning Procedures

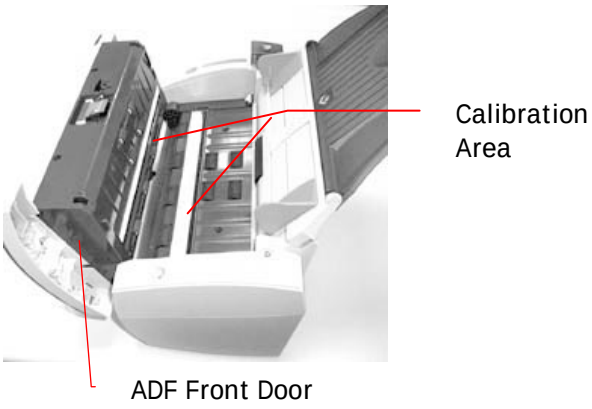
1) Soak a cotton swab with some isopropyl alcohol. (95%).
2) Press the ADF Release button on the upper-left. Open the front door slightly to the left. Wipe the upper feeding roller by moving the swab from side to side. Rotate the roller forward with your finger and repeat the cleaning steps above until the entire roller is cleaned.
3) Wipe the ADF pad in one direction from top to bottom or the other way around. Be careful not to damage the pick springs.
4) Close the scanner front door. Your scanner is now ready for use.





7.2 Cleaning the Calibration Area

1. Press the Paper Jam Clearing button. Open the front door to the left.
2. Wet a cotton swab with some isopropyl alcohol. (95%)
3. Wipe the glass and the white area as illustrated in below by moving the swab from side to side to rid the dust or dirt.

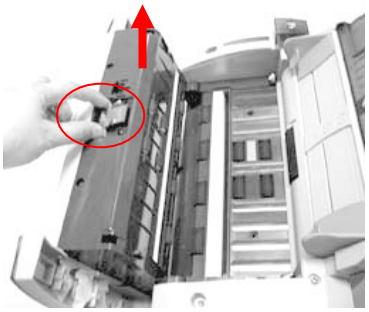


7.3 Replacing the Snap-in Pad Module

After scanning approximately 20,000 pages through the ADF, the pad may be worn out and you may experience problems with document feeding. In this case, it is highly recommended to replace the pad module with a new one. For ordering the pad module, please consult your nearest dealer and follow the procedure below to replace it.

Disassembling Procedure

1. Press the Paper jam clearing button on the upper-left corner.
2. Gently open the ADF Front cover to the left.
3. Press both arms of the ADF snap-in pad module inwardly with your fingers to pull out the ADF snap-in pad module.



Assembling Procedure

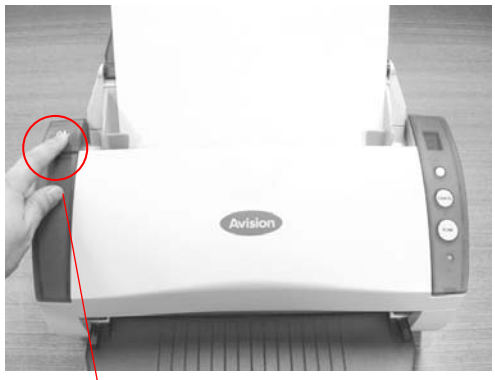
1. Take out the ADF pad module from the box.
2. Press both arms of the ADF snap-in pad module inwardly with your two fingers.
3. Place it into the holes until it snaps into place.

8. Troubleshooting

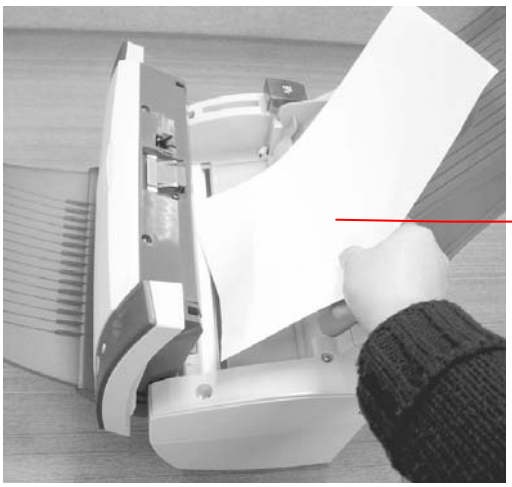
8.1 Clearing a Paper Jam

In the event of a paper jam, follow the procedures below to remove the paper:

1. Press the ADF Release Button on the left side. Gently open the Scanner Front Door to the left.
2. Carefully pull the paper out of the ADF unit.
3. Close the scanner front door. Your Scanner is now ready to use.



ADF Release button


Document

8.2 Questions and Answers

Question: Paper becomes jammed during scanning.

Answer: 1) Open the scanner front door.
2) Pull out the jammed paper carefully.
3) Close the scanner front door.

Question: More than one sheet of paper are fed into the scanner.

Answer: 1) Open the scanner front door.
2) Remove the multi-fed sheets of paper.
3) Close the scanner front door.
4) Flatten the corners and edges. Loosen the paper before putting it into the paper guide again.
5) Check the feeding roller condition. If necessary, follow the cleaning directions in section 5.1 and perform the cleaning.

Question: Paper becomes skewed in the scanner.

Answer: 1) Use the slide guide to keep the paper path straight.
2) Check the condition of the feeding roller. If necessary, follow the cleaning directions in Section 5.1 and perform the cleaning.

Question: Why is it my scanned image always comes out too dark?

Answer: 1) Modify the Gamma setting to 1.8 for your monitor and, when printing, set Gamma to 2.2 for your printer.

2) Use the Brightness setting of the TWAIN user interface to get a brighter image.

Question: Sometimes it seems the scanner does not detect paper?

Answer: The scanner paper sensor is located at the center of the paper guide. Please place the document you need to scan on the paper guide and use the slide guides to keep the paper path straight.

Question: When I choose optical resolution to be 600 dpi, the "auto crop" and "deskew" functions will be disabled.

Answer: Since to perform auto crop and deskew consumes great deal of system memory, it is suggested if you wish to perform "auto crop" and "deskew" functions, please choose your optical resolution to be smaller than 600 dpi to prevent a error message.

8.3 Technical Service

Before contact Avision, please prepare the following information:

- Scanner serial & revision number (located on the bottom of the scanner);
- Hardware configuration (e.g., your host CPU type, RAM size, free disk space, display card, interface card);
- The name and version of your scanning software application;
- The version of your scanner driver.

Please call us at:

Headquarter
Avision Inc.
No. 20, Creation Road I, Science-Based Industrial Park,
Hsinchu 300, Taiwan, ROC
TEL: +886 (3) 578-2388
FAX: +886 (3) 577-7017
E-MAIL: service@avision.com.tw
Web Site: http://www.avision.com.tw

US and Canada Area
Avision Labs, Inc.
6815 Mowry Ave., Newark CA 94560, USA
TEL: +1 (510) 739-2369
FAX: +1 (510) 739-6060
E-MAIL: support@avision-labs.com
Web Site: http://www.avision.com

9. Specifications

All specifications are subject to change without notice.

Model Number：	FF-0609H
Scanner Type:	Desktop sheet-fed
Optical Resolution:	600 dpi * 1200 dpi
Scanning Modes:	Black & White
	Gray
	Color
ADF Capacity:	Up to 50 pages
Document Size:	Letter, legal, A4, B5, A5
Max. Document Size:	8.5"x14" (ADF)
Min. Document Size:	3.5" x 2" (ADF)
Paper Weight:	16 lbs. to 24 lbs.
Interface:	Hi-speed USB 2.0
Power Source:	24V, 1.5A
Power Consumption:	<30W (operation)
	<12W (standby)
Operating Temperature:	5ºC~35ºC
Dimensions: (WxHxD)	162 mm x 337 mm x 167 mm
Weight:	Approx. 4 kgs